

(Paper No. 6), the Examiner withdrew the rejection of original claims 7 to 9 under 35 USC 103 as being anticipated by the combined teachings of Faigle and Holmberg et al. of record. To supply the teachings missing from those references the Examiner in Paper No. 7 then rejected claims 7 to 9 under 35 USC 103 as being unpatentable over the newly cited Korsell patent in view of Holmberg et al., of record. In reaching this conclusion, the Examiner on page 3, paragraph 8 concluded that those two references disclose all the limitations of the instant claimed invention (original claims 7 to 9), except wherein each of the end sections of a channel are inclined with respect to the edges of the sheet, and are connected by a channel section which is disposed at right angles to the edges. Citing In re Seid, the Examiner concluded there was no patentable weight set forth in the application to demonstrate that the new shape of the channels provided a significant, unforeseen improvement in the claimed panel.

However, it is respectfully submitted that this final rejection overlooks a significant difference between applicant's claimed panel and those taught by the Korsell and Holmberg et al. patents. For example, original claims 7 to 9 define the claimed cardboard sheets as having formed therein non-rectilinear undulated channels with the channels of adjacent cardboard sheets in the panel having the contact points of the channels glued together. This contrasts with the teachings of Holmberg et al., which disclosed cooling panels specifically designed to keep adjacent plates or sheets spaced from each other by employing distance members 5 and 6 to keep the contact plates (1) of that patent in spaced relation to each other, so that they can be stacked one upon the other, as noted in column 4, lines 40 to 43 of Holmberg et al. In the newly cited Korsell patent adjacent corrugated sheets (for example 10 and 12) are specifically maintained in spaced relation to each other in Fig. 1 by distance strips 18, in Fig. 2 by folds 24 of

increased height, in Fig. 3 by widened edge folds 30, and in Fig. 4 by folds 34 of increased height. Contrary to such construction, applicant's combined screening and humidifying panel, as defined in claim 7, is formed with the channel crests of adjacent sheets being in contact with each other at spaced points therealong, and the contact points of the channel crests of adjacent sheets are glued together. It is respectfully submitted that claim 7, as now amended, is not setting forth any new or different structural feature, but simply is somewhat more specific to the contact points of adjacent sheets that were glued together as defined by claim 7 in Paper No. 6.

In addition to the above-noted distinctions, the Examiner's attention is directed to page 2 of applicant's specification, lines 1 to 3, wherein the applicant points out that by known techniques it is impossible to make undulated cardboard with non-rectilinear undulations. On page 1 of the specification the applicant points out that screening panels (wherein opposite ends of each channel are offset from each other to prevent or reduce the inlet of light into the channel) can be made from any material but in general plastic is preferred to easily press therein channels of non-rectilinear configuration. Humidifying panels, which must be moderately absorbent so as to obtain a moist surface, preferably are made from impregnated cardboard, but as noted on page 2 of the specification, lines 1 through 6, it is impossible, by known techniques, to make undulated cardboard with non-rectangular undulations, and as a consequence the channels heretofore have been made rectilinear. In paragraph 9 of the last Office Action the Examiner has contended that the art of corrugated cardboard is old, and many methods to corrugate cardboard are well known, and that the art of record uses alternative methods, to the one offered by the applicant, to produce the non-rectilinear undulations. But, it is respectfully submitted the so-called "alternative methods" postulated by the Examiner do not in fact specifically refer to forming non-rectilinear undulations in

simple cardboard.

For example, the Korsell patent, in column 1, lines 66 to 68 points out that the sheets 10, 12 may for example consist of a plastic material or the like, but it is respectfully submitted that cardboard is not "like" a plastic material. For that matter, the Holmberg et al. patent, in column 3, lines 62 to 67, points out that while contact plates for cooling towers are often made of metal, plastic or impregnated cardboard, a fine structure is easily formed by bending flat contact plates of plastic, and preferably of thermoplastic plastic, for example polyvinyl chloride. And claim 10 of that patent specifically claims contact bodies that are made of a thermoplastic plastic. In essence, there is absolutely no mention in any of these references that the materials employed for the production of the plates or panels are equivalent in their physical and mechanical characteristics and in their behavior during the manufacturing steps. In other words, in view of the prior art, and the point made by the applicant herein, it is respectfully submitted that there is no basis for contending that cardboard is extensible and its shaping in a press with curved undulated channels can occur without getting torn. It is submitted that this result does not necessarily occur simply by comparing cardboard with plastics or metals. Moreover, as noted on page 5, lines 22-25 of applicant's specification, the cardboard must be deformed in a certain way to prevent tearing.

In view of the foregoing, an early and favorable action on this application and withdrawal of the final rejection of claims 7, 8 and 9 is respectfully requested.

Enclosed also are prints of marked-up copies of claims showing the changes that have been made by amendment of claims and substitution of the new claims.

Should there be any question about this case the Examiner is requested to

telephone the undersigned attorney at Rochester, New York, Area Code 585 No. 325-4618.

Respectfully submitted,

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By: 

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Rewrite claim 7 as follows:

7. (Amended) A ^{Twice} screening and humidifying panel for avicultural facilities or greenhouses and formed from a plurality of cardboard sheets each having formed therein a plurality of non-rectilinear undulated channels, and with the respective channels of adjacent sheets in said panel being of different mutual alternating inclination and having the contact points of the channels ^{crests} of adjacent sheets ^{being} glued together.

Rewrite claim 8 as follows:

8. (Amended) A panel in accordance with claim 7 wherein each channel extends between the edges of a respective sheet and has end sections near the sheet edges which constitute inlet and outlet sides of the panel, and which end sections are virtually at right angles to said edges, and each channel has ^{or} inclined sections for connection of said end sections ^{thereof}.

inclined to said edges and connecting

Rewrite claim 9 as follows:

9. (Amended) A panel in accordance with claim 7, wherein each channel extends between the edges of a respective sheet and has end sections ^{thereof} near the sheet edges which constitute inlet and outlet sides of the panel, and which ^{end sections} are inclined with respect to said edges, and each channel has ^a sections ^{thereof extending} virtually at right angles to said edges and which are for connection of ^{connecting} said end sections ^{thereof}.

- (Amended) 10. A press for obtaining deformed cardboard sheets for manufacturing screening and humidifying panels in

of the type defined in claim 7,

20 particular for avicultural facilities or greenhouses and comprising a die made up of a plurality of segments each representing at least part of a channel and moving sequentially to press the cardboard starting from one end of the press.

(Amended) A 25 11. press in accordance with claim 10 wherein the segments of the plurality are supported elastically on a moving press table to press sequentially the cardboard upon operation of the moving press table.

of the type
defined in
claim 7,

~~What is claimed is:~~

12. Process for manufacturing screening and humidifying panels and in particular for avicultural facilities or greenhouses comprising the steps of shaping the cardboard sheets with non-rectilinear undulated channels by means of sequential pressing of the individual channels, and gluing together of the sheets arranged with alternating different mutual inclination of the channels.
13. ~~12~~ Process in accordance with claim ¹² wherein each channel has end sections near the edges of the sheet which will constitute inlet outlet sides of the panel and which are virtually at a right angle to said edges, and inclined sections for connection of said end sections.
14. ~~13~~ Process in accordance with claim ¹³ wherein each channel has end sections near the edges of the sheet which will constitute inlet outlet sides of the panel and which are inclined with respect to said edges, and sections virtually at a right angle to said edges for connection of said end sections.
15. ~~14~~ Process in accordance with claim ¹⁴ wherein pressing takes place by means of a plurality of die sections each representing at least part of a channel and moved to press the cardboard sequentially.
16. ~~15~~ Process in accordance with claim ¹⁵ wherein the sheets are cut in lozenge shape before pressing to compensate for the contraction produced by the pressing.
17. ~~16~~ Process in accordance with claim ¹⁶ wherein the sheets are made from a continuous strip of cardboard extending in the direction of the contraction produced by the pressing and are cut from the strip after pressing.